



KRI Application

Applicant Name: Owensboro Riverport Authority
Project Title: Improvement in Access Drives
Date Submitted: April 29, 2019

RECEIVED
APR 29 2019
Div. of Planning

Experience. Performance. Excellence.

1771 River Road ♦ P.O. Box 21955 ♦ Owensboro, KY ♦ 42304-1955
1 877 599-7929 ♦ (270) 926-4238 ♦ FAX (270) 683-3711
www.OwensboroRiverport.com



Kentucky Riverport Improvement (KRI) Application

Project Title: Improvement to Access DrivesAuthority Name: Owensboro Riverport AuthorityApplication Year: 19-20

Applicant Contact Information

Address: 1771 River RoadCity: OwensboroState: KYZip Code: 42301Contact Person: Brian WrightContact Title: President/CEOContact Phone Number: 270-663-4034Contact Email Address: bwright@owensbororiverport.com

Project Information

Project Type: Maintenance of accessHow long will project take? 6 monthsProject facilities: ☒ Owned by Riverport Authority ☐ Leased to: _____

Briefly describe the project and its intended purpose:

A significant part of the ORA property is graveled. The gravel lanes are in constant need of maintenance due to heavy truck use. There are 2 areas of the property that need to be graded, compacted and paved due to heavy use. These areas are the Scale Access Drive and Warehouse Dock Access Drive. These 2 areas once paved would greatly reduce the constant maintenance required in the yard due to the heavy truck traffic. The paving on the Scale Access Drive would improve the traffic flow in and out of the port. The paving on the Warehouse Dock Access Drive would allow 3-lane traffic to the guard for easier check-in to Warehouse 4.

Does applicant plan to use their own manpower, equipment, or materials on the project (Force Account) or competitively bid out all work related to the project? Bid OutCurrent # trucks per day: 200-225Trucks per day after project: 200-225Current # train cars per week: 20-30Train cars per week after project: 20-30Current # barges per week: 11-12Barges per week after project: 11-12How will the project increase jobs? N/AHow will the project increase efficiency? Reduce maintenance & mitigate dust issues

Project Funding

Total Project Cost: \$155000Amount of KRI Funding requested: \$77500Applicant Match Amount: \$77500Applicant Match Percent (50% minimum): 50%Applicant Match Source: cash on hand

FOR INTERNAL USE ONLY: DO NOT WRITE IN THIS AREA

Date Received: 4/1/14Application Complete? ☒ Yes ☐ NoEligible Applicant? ☒ Yes ☐ NoPermits Needed? ☐ Yes ☒ NoWTAB Approval ☐ Yes ☐ NoSecretary Approval ☐ Yes ☐ No

Award Amount: _____

Award Date: _____

Notification of Award: _____

MOA #: _____

Notice to Proceed: _____

**Kentucky Riverport Improvement (KRI) Application****Permits / Approvals**

Has the applicant consulted with state and federal agencies on the project (US Army Corps of Engineers, US Coast Guard, US Fish and Wildlife Service, Kentucky Division of Water, Kentucky Heritage Council, etc.)? Not Applicable

Has state and federal agency consultation determined permits are needed? Not Applicable

Have all required permits (environmental, encroachment, etc.) been obtained? Not Applicable

Submission Checklist (see guidance document for details)

- ☒ Cover Sheet;
- ☒ Kentucky Riverport Improvement Application;
- ☒ Statement of Work;
- ☒ Scope of Work;
- ☒ Project Schedule/Timeline;
- ☒ Certification of the ability to provide the minimum of 50% match requirement;
- ☒ Maps, Aerial Photos, Drawings, and Photographs, as needed;
- ☒ Engineering Plans, Schematics, Details, Drawings of the proposed project, as needed;
- ☒ Copies of all correspondence or evidence of consultation that has occurred with state and federal agencies, if applicable;
- ☒ Annual Affidavit for Bidders, Offerors and Contractors from applicant (if not already on file);
- ☒ Documentation of Port Planning.

Final Submission

Completed applications and all required attachments must be submitted electronically in PDF format and in paper format. Mailed and emailed applications shall be received by the Division before May 1st. PDF copies shall be sent via email to KYTC.ModalPrograms@ky.gov. Two (2) stapled or bound copies must be mailed to:

Kentucky Transportation Cabinet
Division of Planning – KRI Application
200 Mero Street
Frankfort, Kentucky, 40622

Certification

I have read the Riverport Improvement Project Guidance Document and understand and agree to abide by what is stated therein. I agree that incomplete applications, applications missing any of the above required supporting documents, or applications received after the deadline, will be deemed ineligible by Division staff without consideration for KRI funds and returned to the applicant. I also hereby certify, subject to the provisions of KRS 523.100 (unsworn falsification to authorities), that the above information is true and correct to the best of my knowledge.

Printed Name Brian Wright

Signature

Title

President

Date

4-29-19



April 29, 2019

RE: Improvement in Access Drives

Dear Sir or Madam:

Owensboro Riverport Authority is one of Kentucky's premier public riverports. More than 1.1 million tons moved through the port via river, rail and road last fiscal year. ORA is applying for financial assistance from the Kentucky Transportation cabinet through the Riverport Improvement Project under the "maintenance of access" provision.

This is an improvement in access roads project. This grant request is for 50% funding of this project. The truck traffic has increased 10-15% over last fiscal year at the Owensboro Riverport and we anticipate new business in 2019-20 which will continue or growth.

Your consideration of this project is critical to improving the port to meet current and future transportation needs.

Sincerely,

Brian Wright
President/CEO

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Scope of Work

Improvement of Access Drives

ORA SCALES ACCESS DRIVE

- a.) Mill existing compacted crushed limestone surface as necessary, depth varies, per Contract Documents
- b.) Place and compact DGA base materials full width & profile depth of milling area per Contract Documents
- c.) Place compacted asphalt pavement base and surface lifts per Contract Documents
 - 1.) 3.5 inches of compacted asphalt base (3 BASE 1.00 DPG 64-22)
 - 2.) 2.5 inches of compacted asphalt surface (3 SURFACE .50 DPG 76-22)
 - 3.) 1.5 inches of compacted asphalt surface (3 SURFACE .50 DPG 76-22)

COST - \$50,000

WAREHOUSE DOCK ACCESS DRIVE

- a.) Clear and grub existing vegetated portion of the proposed pavement work area
- b.) Excavate existing vegetated and/or loose gravel areas to earthen subgrade elevations per Contract Documents
- c.) Mill existing compacted/hard-surfaced crushed limestone surface as necessary, depth varies, per Contract Documents
- d.) Place and compact DGA base materials full width & profile depth of milling area per Contract Documents

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Scope of Work (continued)

Improvement of Access Drives

- e.) Place compacted asphalt pavement base and surface lifts per Contract Documents
 - 1.) 3.5 inches of compacted asphalt base (3 BASE 1.00 DPG 64-22)
 - 2.) 2.5 inches of compacted asphalt surface (3 SURFACE .50 DPG 76-22)
 - 3.) 1.5 inches of compacted asphalt surface (3 SURFACE .50 DPG 76-22)

COST - \$105,000

TOTAL PROJECT COST - \$155,000

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Project Schedule and Timeline

Improvement of Access Drives

November 2019 – Advertise for Bids

February 2020 – Evaluate Bids and Award Contract

March 2020 - Commence Work

May 2020 - Complete Work as Outlined in Plan

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Demonstration of Ability to Provide 50%
Of \$155,000 Improvement of Access Drives

We attest that Owensboro Riverport Authority has free cash balance generated from operations more than sufficient to provide 50% match requirements.


Brian Wright, President/CEO

4-29-19
Date


Amanda Bolen, Accounting Manager

4/29/19
Date

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Detailed Budget

Improvement of Access Roads

See attached for detailed Project Estimate

GRAND TOTAL \$155,000

50% Match \$77,500

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Copies of correspondence or consultation with state and federal agencies:

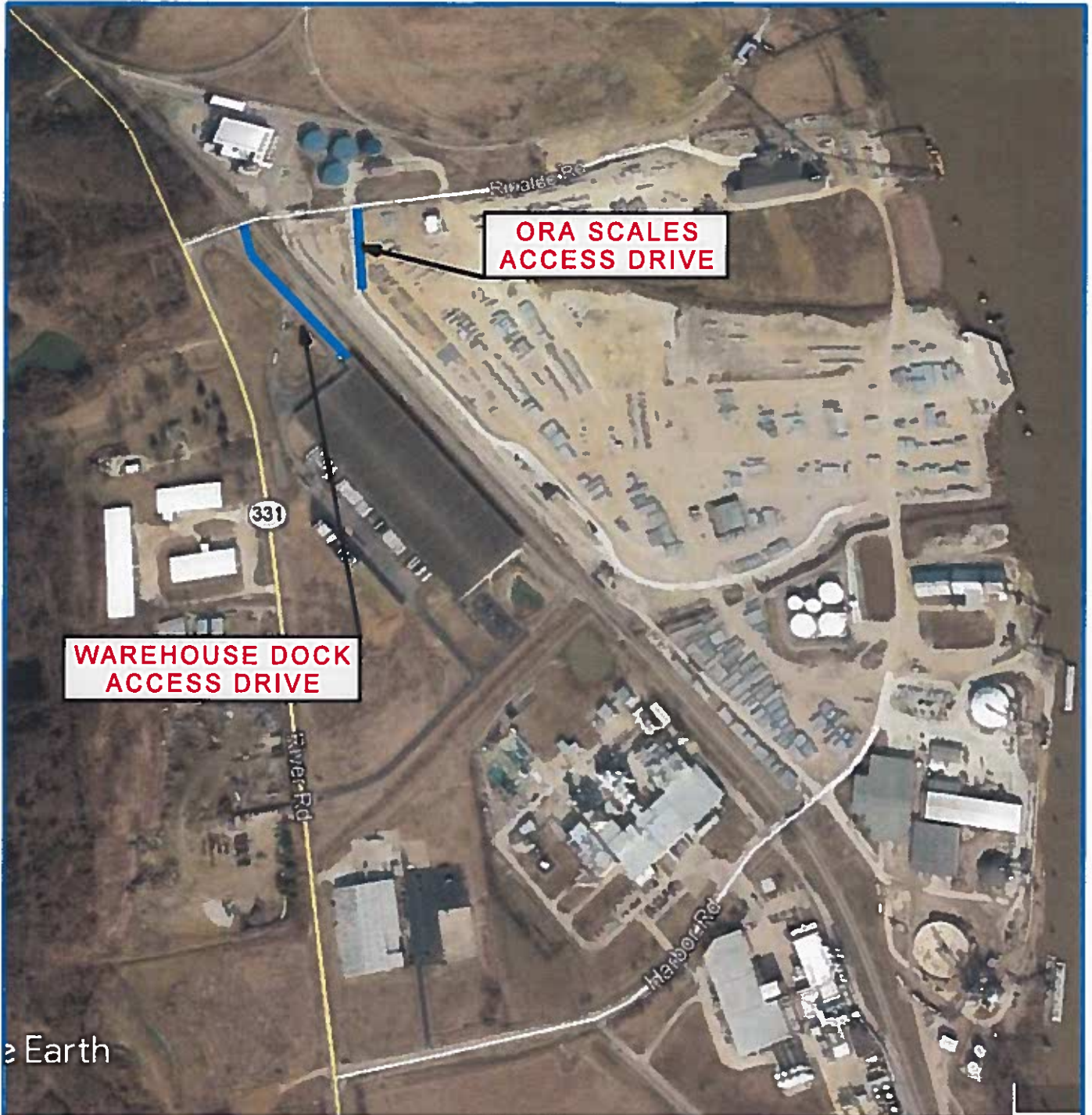
Not Applicable

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2019 DRIVE IMPROVEMENT PROJECTS MAP



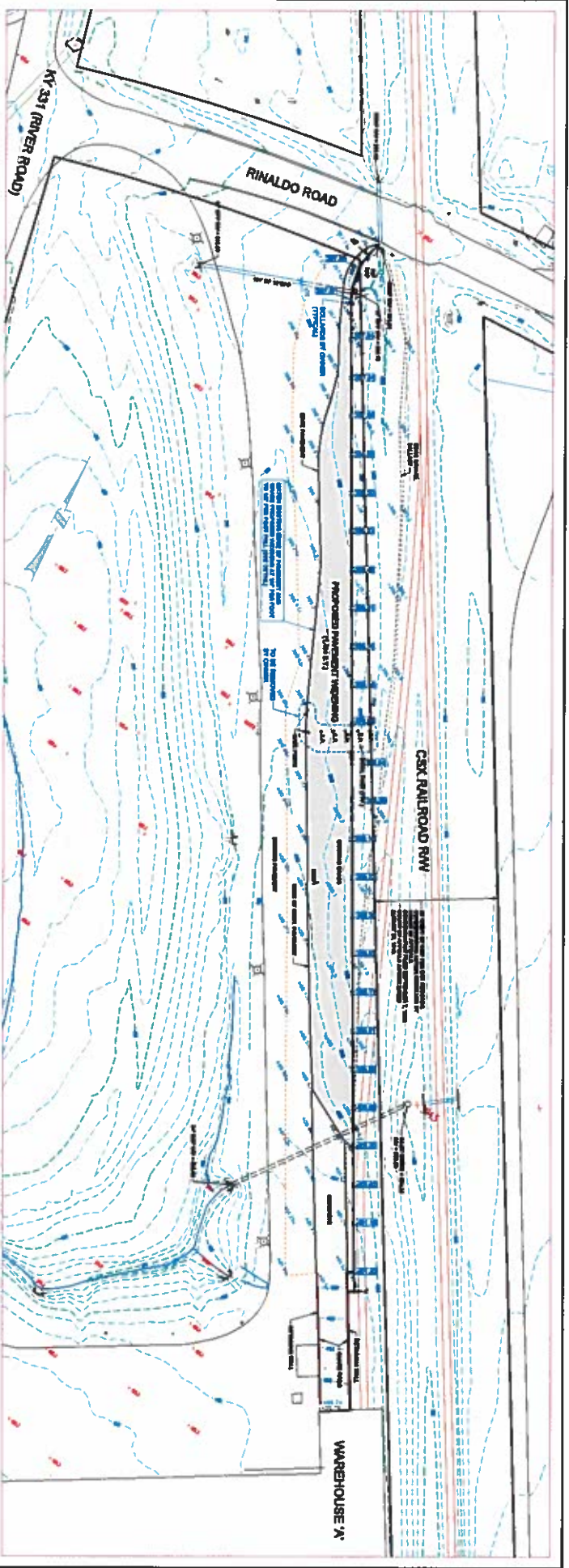
**Owensboro
Riverport**

LOCATED OFF OF KY 331 (RIVER ROAD)
OWENSBORO
DAVIESS COUNTY, KENTUCKY
APRIL 2019 SCALE: 1"=600' APPROX.

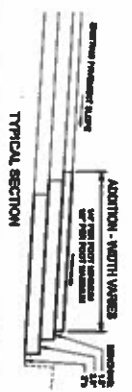
PREPARED BY:



3037 ALVEY PARK DRIVE WEST
OWENSBORO, KENTUCKY 42303
(270) 683-7558 FAX (270) 683-9277



- 1. 2" HOT FRESH ASPHALT SURFACE, 100,000 LB/CY
- 2. 4" HOT FRESH ASPHALT SURFACE, 100,000 LB/CY
- 3. 6" HOT FRESH ASPHALT SURFACE, 100,000 LB/CY
- 4. 8" HOT FRESH ASPHALT SURFACE, 100,000 LB/CY
- 5. 10" HOT FRESH ASPHALT SURFACE, 100,000 LB/CY
- 6. 12" HOT FRESH ASPHALT SURFACE, 100,000 LB/CY
- 7. 14" HOT FRESH ASPHALT SURFACE, 100,000 LB/CY
- 8. 16" HOT FRESH ASPHALT SURFACE, 100,000 LB/CY
- 9. 18" HOT FRESH ASPHALT SURFACE, 100,000 LB/CY
- 10. 20" HOT FRESH ASPHALT SURFACE, 100,000 LB/CY
- 11. 22" HOT FRESH ASPHALT SURFACE, 100,000 LB/CY
- 12. 24" HOT FRESH ASPHALT SURFACE, 100,000 LB/CY
- 13. 26" HOT FRESH ASPHALT SURFACE, 100,000 LB/CY
- 14. 28" HOT FRESH ASPHALT SURFACE, 100,000 LB/CY
- 15. 30" HOT FRESH ASPHALT SURFACE, 100,000 LB/CY
- 16. 32" HOT FRESH ASPHALT SURFACE, 100,000 LB/CY
- 17. 34" HOT FRESH ASPHALT SURFACE, 100,000 LB/CY
- 18. 36" HOT FRESH ASPHALT SURFACE, 100,000 LB/CY
- 19. 38" HOT FRESH ASPHALT SURFACE, 100,000 LB/CY
- 20. 40" HOT FRESH ASPHALT SURFACE, 100,000 LB/CY
- 21. 42" HOT FRESH ASPHALT SURFACE, 100,000 LB/CY
- 22. 44" HOT FRESH ASPHALT SURFACE, 100,000 LB/CY
- 23. 46" HOT FRESH ASPHALT SURFACE, 100,000 LB/CY
- 24. 48" HOT FRESH ASPHALT SURFACE, 100,000 LB/CY
- 25. 50" HOT FRESH ASPHALT SURFACE, 100,000 LB/CY
- 26. 52" HOT FRESH ASPHALT SURFACE, 100,000 LB/CY
- 27. 54" HOT FRESH ASPHALT SURFACE, 100,000 LB/CY
- 28. 56" HOT FRESH ASPHALT SURFACE, 100,000 LB/CY
- 29. 58" HOT FRESH ASPHALT SURFACE, 100,000 LB/CY
- 30. 60" HOT FRESH ASPHALT SURFACE, 100,000 LB/CY
- 31. 62" HOT FRESH ASPHALT SURFACE, 100,000 LB/CY
- 32. 64" HOT FRESH ASPHALT SURFACE, 100,000 LB/CY
- 33. 66" HOT FRESH ASPHALT SURFACE, 100,000 LB/CY
- 34. 68" HOT FRESH ASPHALT SURFACE, 100,000 LB/CY
- 35. 70" HOT FRESH ASPHALT SURFACE, 100,000 LB/CY
- 36. 72" HOT FRESH ASPHALT SURFACE, 100,000 LB/CY
- 37. 74" HOT FRESH ASPHALT SURFACE, 100,000 LB/CY
- 38. 76" HOT FRESH ASPHALT SURFACE, 100,000 LB/CY
- 39. 78" HOT FRESH ASPHALT SURFACE, 100,000 LB/CY
- 40. 80" HOT FRESH ASPHALT SURFACE, 100,000 LB/CY
- 41. 82" HOT FRESH ASPHALT SURFACE, 100,000 LB/CY
- 42. 84" HOT FRESH ASPHALT SURFACE, 100,000 LB/CY
- 43. 86" HOT FRESH ASPHALT SURFACE, 100,000 LB/CY
- 44. 88" HOT FRESH ASPHALT SURFACE, 100,000 LB/CY
- 45. 90" HOT FRESH ASPHALT SURFACE, 100,000 LB/CY
- 46. 92" HOT FRESH ASPHALT SURFACE, 100,000 LB/CY
- 47. 94" HOT FRESH ASPHALT SURFACE, 100,000 LB/CY
- 48. 96" HOT FRESH ASPHALT SURFACE, 100,000 LB/CY
- 49. 98" HOT FRESH ASPHALT SURFACE, 100,000 LB/CY
- 50. 100" HOT FRESH ASPHALT SURFACE, 100,000 LB/CY



**WAREHOUSE DOCK DRIVE ADDITION
ASPHALT PAVEMENT DETAIL**

SEE TO SHEET



ENGINEER'S CERTIFICATION
I, the undersigned, being a duly Licensed Professional Engineer in the State of Kentucky, do hereby certify that I am the author of the foregoing and that the same was prepared by me or under my direct supervision and that I am a duly Licensed Professional Engineer in the State of Kentucky.

**Owensboro
Riverport**

1000 EAST 10TH STREET
OWENSBORO, KY 40301
TEL: 502-675-1000
WWW.OWENSBORORIVERPORT.COM

HRG

1000 EAST 10TH STREET
OWENSBORO, KY 40301
TEL: 502-675-1000
WWW.HRG.COM

ANNUAL AFFIDAVIT FOR BIDDERS, OFFERORS AND CONTRACTORS

Affidavit Effective Date: 7-1-19
Affidavit Expiration Date: 6-30-20
Maximum Length One-Year

REQUIRED AFFIDAVIT FOR BIDDERS, OFFERORS AND CONTRACTORS

PAGE 1 OF 2

FOR BIDS AND CONTRACTS IN GENERAL:

- I. Each bidder or offeror swears and affirms under penalty of perjury, that to the best of their knowledge:
- a. In accordance with KRS 45A.110 and KRS 45A.115, neither the bidder or offeror as defined in KRS 45A.070(6), nor the entity which he/she represents, has knowingly violated any provisions of the campaign finance laws of the Commonwealth of Kentucky; and the award of a contract to the bidder or offeror or the entity which he/she represents will not violate any provisions of the campaign finance laws of the Commonwealth.
 - b. The bidder or offeror swears and affirms under penalty of perjury that, to the extent required by Kentucky law, the entity bidding, and all subcontractors therein, are aware of the requirements and penalties outlined in KRS 45A.485; have properly disclosed all information required by this statute; and will continue to comply with such requirements for the duration of any contract awarded.
 - c. The bidder or offeror swears and affirms under penalty of perjury that, to the extent required by Kentucky law, the entity bidding, and its affiliates, are duly registered with the Kentucky Department of Revenue to collect and remit the sales and use tax imposed by KRS Chapter 139, and will remain registered for the duration of any contract awarded.
 - d. The bidder or offeror swears and affirms under penalty of perjury that the entity bidding is not delinquent on any state taxes or fees owed to the Commonwealth of Kentucky and will remain in good standing for the duration of any contract awarded.
 - e. The bidder or offeror swears and affirms under penalty of perjury that the entity bidding, is not currently engaged in, and will not for the duration of the contract engage in, the boycott of a person or an entity based in or doing business with a jurisdiction with which Kentucky can enjoy open trade, as defined in Executive Order No. 2018-905.
 - f. The bidder or offeror swears and affirms that the entity bidding, and all subcontractors therein, have not violated any of the prohibitions set forth in KRS 11A.236 during the previous ten (10) years, and further pledge to abide by the restrictions set forth in such statute for the duration of the contract awarded.

FOR "NON-BID" CONTRACTS (I.E. SOLE-SOURCE; NOT-PRACTICAL OR FEASIBLE TO BID; OR EMERGENCY CONTRACTS, ETC):

- II. Each contractor further swears and affirms under penalty of perjury, that to the best of their knowledge:
- a. In accordance with KRS 121.056, and if this is a non-bid contract, neither the contractor, nor any member of his/her immediate family having an interest of 10% or more in any business entity involved in the performance of any contract awarded, have contributed more than the amount specified in KRS 121.150 to the campaign of the gubernatorial slate elected in the election last preceding the date of contract award.

ANNUAL AFFIDAVIT FOR BIDDERS, OFFERORS AND CONTRACTORS

REQUIRED AFFIDAVIT FOR BIDDERS, OFFERORS AND CONTRACTORS

PAGE 2 OF 2

- b. In accordance with KRS 121.330(1) and (2), and if this is a non-bid contract, neither the contractor, nor officers or employees of the contractor or any entity affiliated with the contractor, nor the spouses of officers or employees of the contractor or any entity affiliated with the contractor, have knowingly contributed more than \$5,000 in aggregate to the campaign of a candidate elected in the election last preceding the date of contract award that has jurisdiction over this contract award.
- c. In accordance with KRS 121.330(3) and (4), and if this is a non-bid contract, to the best of his/her knowledge, neither the contractor, nor any member of his/her immediate family, his/her employer, or his/her employees, or any entity affiliated with any of these entities or individuals, have directly solicited contributions in excess of \$30,000 in the aggregate for the campaign of a candidate elected in the election last preceding the date of contract award that has jurisdiction over this contract.

As a duly authorized representative for the bidder, offeror, or contractor, I have fully informed myself regarding the accuracy of all statements made in this affidavit, and acknowledge that the Commonwealth is reasonably relying upon these statements, in making a decision for contract award and any failure to accurately disclose such information may result in contract termination, repayment of funds and other available remedies under law. If the bidder, offeror, or contractor becomes non-compliant with any statements during the affidavit effective period, I will notify the Finance and Administration Cabinet, Office of Procurement Services immediately. I understand that the Commonwealth retains the right to request an updated affidavit at any time.

Brian Wright
Signature
President
Title

Brian Wright
Printed Name
4-29-19
Date

Company Name Owensboro Riverport Authority
Address 1771 River Road
Owensboro, KY 42301

Commonwealth of Kentucky Vendor Code (if known) _____

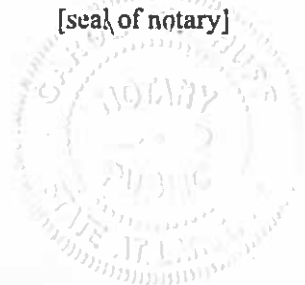
Subscribed and sworn to before me by Brian Wright President/CEO
(Affiant) (Title)

of Owensboro Riverport Authority this 29 day of April, 2019.
(Company Name)

Carol Huff
Notary Public

[seal of notary]

My commission expires: May 21, 2019



Owensboro Riverport Master Plan Update 2016 Executive Summary



July 20, 2016

Prepared for

The Owensboro Riverport Authority

By

W. R. Coles and Associates

Owensboro Riverport Master Plan Update 2016 Executive Summary

July 20, 2016

**Prepared for
The Owensboro Riverport Authority**

**By
W.R. Coles and Associates**

**PO Box 159266
Nashville, TN 37215
615-594-1576**

www.wrcoles.com

Owensboro Riverport Master Plan Update 2016 Executive Summary

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1. Introduction

The Owensboro Riverport Authority (ORA) facilities near Ohio River Mile 759L opened for business in 1976. The underlying purpose of ORA's existence is to improve the economic health of the area by providing access to low cost waterways transportation for industrial, agricultural, and other users who are important to the region. Leaders at ORA retained W. R. Coles and Associates to provide advice and guidance for making strategic capital investments, resulting in the 2012 Master Plan. Many of its key recommendations have been implemented, and ORA business continues to grow. This 2016 Update builds on the 2012 Plan and adds information based on recent developments in the marketplace and at ORA. This Update will be used not only to provide strategic direction, but also as a communications tool in sharing ORA's vision with key community leaders, investors, potential tenants, and customers.

As shown on *Exhibit 1-1*, ORA has completed several projects recommended in the 2012 Plan:

- Construction of a new general cargo dock and purchase of new mobile harbor crane;
- Construction of a new access road;
- Construction of a new scale house area and subsurface utilities;
- Construction of new port operations area hardstand; and
- Acquisition of Rinaldo Road.

Projects currently underway but not yet completed as of July 2016 include construction of a new scale house, construction of a new port security system, and construction of a new port entry security gate and guard house near the intersection of River Road and Rinaldo Road.

In 2015, ORA also completed construction and commenced operation of a new minerals milling complex just north of Rinaldo Road along the CSX main line railroad tracks.

This Executive Summary provides a very brief synopsis of the main points covered in the 2016 Riverport Master Plan Update.

2. Waterborne Commerce and Competitive Market Update

The location of ORA in context of our nation's inland waterway system and the Gulf Coast ports of New Orleans and Mobile is shown in *Exhibit 2-1*.

The nation's waterways provide an efficient, safe, cost-effective, and environmentally sound way to transport products. Equivalent carrying capacities of barge, truck, and rail are shown in *Exhibit 2-2*. A standard jumbo hopper barge is 35 feet wide and 195 feet long. A barge is typically 12 to 14 feet deep and drafts nine feet when loaded. The typical Ohio River tow has 15



of these barges—three wide and five long—winched together with cables and stretching nearly 1,000 feet.

In the future, vessel sizes may be larger or have a greater width, but their size is limited by the size of the locks on the rivers.

Moving goods economically allows farmers, manufacturers, and other industries to be more competitive in world markets, thus creating and retaining jobs in the US and allowing consumers to enjoy lower product costs, and thus strengthening the overall economy.

Within ORA's market area, there are twelve (12) other active general purpose terminals as shown on *Exhibit 2-3*. There are also numerous specialty single-purpose river terminals handling commodities including aggregates, coal, grain, fuel, and cement. To fulfill its mission in helping the Owensboro area retain and attract jobs and tax base, ORA must remain very competitive with respect to its capabilities, services provided, reliability and rates.



Exhibit 2-1. Location of Owensboro on the Inland Waterways System

COMPARE ...

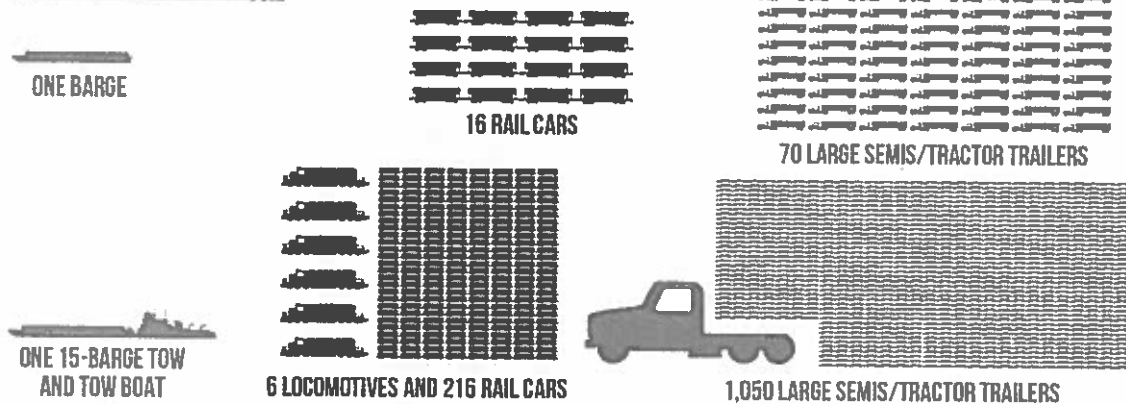


Source: Iowa Department of Transportation | R001 Riverway | Ames, IA | www.iowadot.gov

CARGO CAPACITY

				
ONE BARGE	ONE 15-BARGE TOW	ONE RAIL CAR	ONE 108-CAR TRAIN	ONE LARGE SEMI
1,750 TON	26,250 TON	110 TON	11,880 TON	25 TON
58,333 BUSHELS	874,995 BUSHELS	4,000 BUSHELS	400,000 BUSHELS	910 BUSHELS
1,555,000 GALLONS	23,325,000 GALLONS	33,870 GALLONS	3,387,000 GALLONS	7,865 GALLONS

EQUIVALENT UNITS



EQUIVALENT LENGTHS



PM 6-14-07 2:039

Exhibit 2-2. Standard Cargo Capacities for Barge, Rail, and Truck

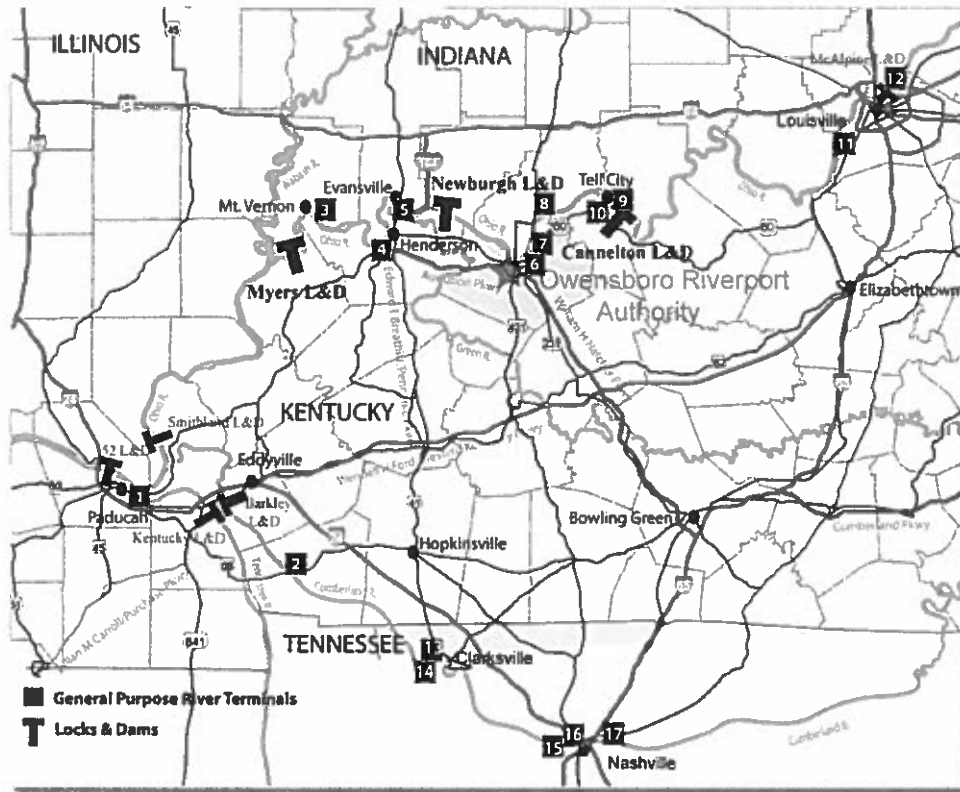


Exhibit 2-3. General Purpose River Terminals with Relevance to ORA

- 1 Paducah-McCracken County Riverport Authority; Paducah KY
- 2 Eddyville Riverport & Ind. Development Authority; Eddyville KY
- 3 Southwind Maritime Centre; Mt. Vernon IN
- 4 Henderson County Riverport Authority; Henderson KY
- 5 Port of Evansville; Evansville IN
- 6 Yellow Banks River Terminal; Maceo KY
- 7 Owensboro Gateway Terminal; Maceo KY
- 8 Rockport River Terminals, Inc.; Rockport IN
- 9 Perry County Port Authority; Tell City, IN
- 10 Owensboro Gateway Terminal East; Hawesville KY
- 11 Louisville & Jefferson County Riverport Authority; Louisville KY
- 12 Clark Maritime Centre; Jeffersonville IN
- 13 Winn Materials; Clarksville TN
- 14 R.J. Corman - Nyrstar; Clarksville TN
- 15 Hunter Marine; Nashville TN
- 16 Hailey's Harbor; Nashville TN
- 17 Cherokee Marine Terminal

2.1. Aluminum

In summary, aluminum consumption in the US is increasing, while production of primary aluminum in the US is declining—resulting in demand for more imported primary aluminum. There were nine operating aluminum smelters in the US in 2012, and there are only six in 2016.

Aluminum companies are steadily shifting away from upstream commodity businesses—mining, refining, and smelting operations—toward value-added products. In 2014, a dozen companies announced aluminum-related projects in the state of Kentucky with almost \$600 million in new investments. This shift is primarily fueled by the auto industry. Tighter fuel efficiency requirements are leading auto manufacturers to use lightweight aluminum for hoods, door panels, and trunks. The use of aluminum sheet for vehicle bodies is expected to increase from 200 million pounds in 2012 to 4 billion pounds by 2025. That is a *twenty-fold increase in consumption of aluminum* in the US transportation sector. One in five vehicles is expected to have all-aluminum bodies within the next decade, compared to one in a hundred now.

According to the 2014 Ducker Worldwide Study on Auto Aluminum Growth, within the decade (2015-2025):

- Seven out of 10 new pickup trucks produced in North America will be aluminum-bodied.
- Every leading automaker will have an aluminum body program in place.
- Aluminum hood penetration will reach 85% and doors will reach 46%; complete bodies will reach 18%, from less than one percent in 2014. This will drive total aluminum content to 547 pounds per vehicle.
- The total North American aluminum content will be 10 billion pounds.
- Aluminum sheet for light vehicle body and closure parts will grow from less than 200 million pounds in 2012 to nearly 4 billion pounds.
- On a volume basis, 26.6% of all the body and closure parts will be made of aluminum.
- Globally, light vehicle aluminum content will approach 35 billion pounds, making light vehicles the most important global market for aluminum.

The shift toward greater aluminum use in the automotive industry has sent aluminum companies scrambling to meet the demand, readying their technology and expanding their processing facilities. *Information obtained indicates that aluminum production in the US is declining, while demand for aluminum is rising. This implies there will be an increase in quantities of imported aluminum.* ORA is well positioned as an aluminum distribution center, and its combination of physical assets, business acumen and reputation for reliability should provide opportunities for future business in this market sector.

2.2. Other Markets

Western Kentucky is a highly productive agricultural region of our nation. Demand for fertilizer and for shipment of grains is expected to remain steady or increase. There is potential for ORA to attract additional dry bulk business in sectors such as minerals and mineral processing. Opportunities exist for general cargoes such as steel coils, steel rebar, and fabricated steel products. The US DOT Maritime Administration continues to promote the container-on-barge concept. ORA also has the potential to attract additional liquid cargoes such as fertilizers, chemicals, and fuel.

3. Strategic Capital Investment Plan

Major capital investments which have been made since the 2012 Plan are listed in the introduction to this Executive Summary. Recommendations for future capital projects are based on supporting the economy of the ORA area in a very competitive economic development environment. In addition to the capital projects described in this chapter, ORA will have continuing requirements for tactical investments such as equipment repair and replacement, maintenance of infrastructure, and improvements in business software and systems. The focus of the 2016 Master Plan Update is strategic investment; therefore, details of tactical investments are not included herein, but are acknowledged as being an important element of future financial needs for ORA.

An overall theme for the recommended capital projects shown on *Exhibit 3-1* is to improve efficiency, safety, and security at ORA, to provide infrastructure for delivery of enhanced customer service, and to position ORA for future opportunities in a highly competitive environment.

The aluminum business continues to grow at ORA. Reduction in US aluminum smelter capacity, coupled with an increase in the use of aluminum, will likely lead to increasing import quantities of primary aluminum shapes (T-bars, slabs, sows, billets, etc.). Industry forecasts indicate increasing demand for aluminum at rolling mills and processing plants, as well as auto manufacturing plants and other end-users. ORA is an established leader in handling, storing, and distributing aluminum, and recently received international recognition for excellent customer service. *The mode of transport (rail or barge) used to bring aluminum to ORA varies based on decisions made by private-sector companies and brokers*, and will vary depending on price of fuel, value of the dollar against other currencies, ultimate origin/destination, duration of storage needed, and other factors. *ORA needs sufficient capacity and capability to receive large quantities of aluminum by either rail or barge.* Efficiency in truck turnaround times is also important.



mission of supporting the growth of jobs and tax base in the area.

While aluminum is a mainstay for ORA, diversification in customer base is also important. Steel coils are an example of a market commodity which could broaden the base of business for ORA, while using many of the physical and administrative systems in place for aluminum. Containerized cargo is another example of a market which could broaden the ORA customer base. In addition to diversification, capital improvements are needed for ORA to remain competitive and to fulfill its

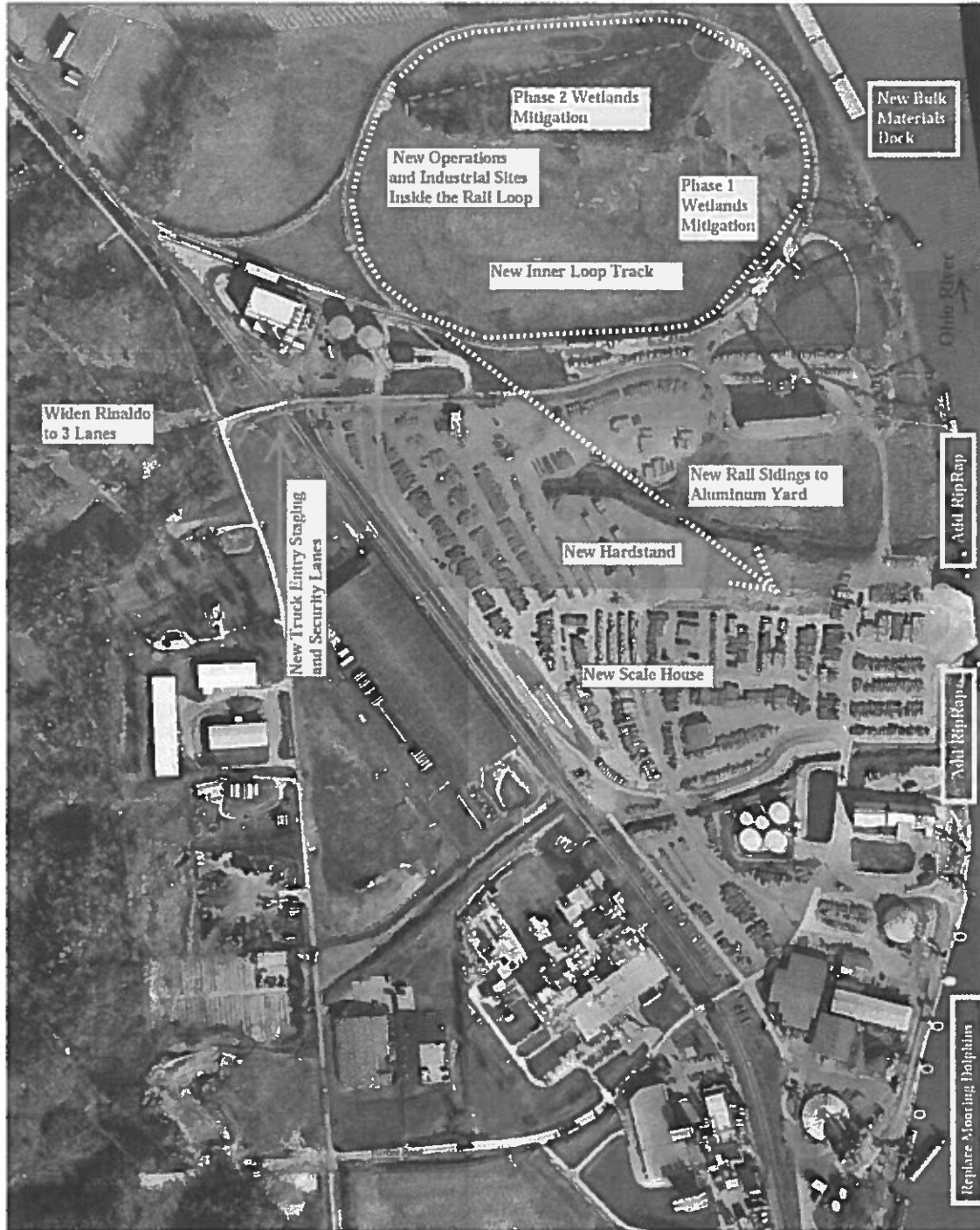


Exhibit 3-1. Ongoing and New Projects at ORA

Shipments of minerals, fertilizers, grain, and other dry bulk products may vary month to month, but are likely to remain stable or increase over the next few years. Western Kentucky is a highly productive agricultural region, resulting in the demand for fertilizer and the production of grain. ORA has a long-term minerals customer and is developing contacts in the marketplace which position ORA to be on the radar for companies with future minerals business. Liquid bulk is also stable and likely to increase, based on recent inquiries and the regional agricultural climate.

Brief descriptions of projects scheduled to be completed in the near future are provided in section 3.1 below. Funding for these ongoing projects is included in the 2016-2017 ORA capital budget. Strategic investments for future years have also been identified and are described in section 3.2.

3.1. Ongoing Projects

The following four projects will improve safety, security, and traffic flow within ORA.

- ❖ **New scale house.** The truck scale complex and important cargo ownership transfer documentation activities will be managed and operated from the new scale house.
- ❖ **Entry gate complex at Rinaldo Road.** Details of a new entry complex, gate system, and guard house are scheduled for completion by the first quarter of 2017.
- ❖ **New security system.** Fencing, gates, guard house, and cameras are included.
- ❖ **Truck pad for staging trailers.** Van trailers are currently staged for pick-up inside the fenced port operations area. A new staging area between Warehouse 4 and River Road is scheduled for development in 2016.

Two projects which will increase the efficiency of crane operations are described below.

- ❖ **Aluminum skip pans.** Aluminum is currently unloaded from barges using a skip pan with a capacity of approximately 12 pieces (T-bars, sows, etc.). New skip pans with capacities of 32 pieces are scheduled for delivery in 2016.
- ❖ **New electrohydraulic bucket and new hopper.** A new 18 cubic-yard bucket and large-capacity hopper are designed to improve efficiency and make better use of crane capacity.

Another ongoing project is underway with the purpose of creating more operating area and providing additional capacity, flexibility, and to position ORA for future opportunities.



- ❖ **New hardstand operating area.** This is an ongoing phased project requiring compacted engineered fill capped with rock, as well as related drainage improvements. The ultimate goal is for all of the operations area to be above the 50-year flood elevation, with critical access roadways, barge docks, and several acres of hardstand above the 100-year flood

elevation. One challenge is to manage the construction in proximity to ongoing daily port operations and to maintain efficiencies in both construction and operations activities.



3.2. New Projects

In addition to ongoing projects, significant new capital investments are recommended. Most are located near or related to the existing rail loop on the north end of the ORA site.



- ❖ **New inner loop rail track.** ORA rail loop tracks are used daily for loading/unloading cargoes and commodities including dry bulk fertilizer, liquid bulk fertilizer, aluminum, and other general cargo. It is also used for operations in the placement and removal of rail cars from the new minerals processing complex. Loading/unloading activities are essential, but they block the flow of rail traffic on the loop. This often results in additional efforts for rail car switching and positioning. A new loop track within the existing loop will provide infrastructure to improve efficiency of rail car movements, rail car storage, and operations. Strategically located switchover locations will connect the inner and outer loop rail tracks. A new road grade crossing is planned to allow truck movement between Rinaldo Road and the area inside the loop tracks. This grade crossing provides access to future industrial sites and ORA port operations areas. The entire inner loop project will be designed and reviewed by CSX to obtain their approval, but it can be constructed in usable segments to make the best use of annual funding availability. The east half of the loop, including the roadway grade crossing, is scheduled for construction in 2016-2017. The west half of the loop will be constructed as need dictates in the future.



- ❖ **New rail access to the aluminum yard south of Rinaldo Road.** Aluminum is a major source of business for ORA. Rail cars of aluminum are now unloaded at the rail loop. Larger forklifts and trucks move it to yard storage south of Rinaldo Road. A new track to connect the rail loop with the aluminum operations area south of Rinaldo is recommended to improve efficiency of unloading aluminum and other manufactured materials from rail cars. Unloading in this area provides several operational advantages. The new location eliminates a bottleneck congestion issue on the loop. The new tracks will be closer to the area where aluminum is stored, and a new concrete rail dock will be an improvement over the portable steel ramps now used to provide forklift access to the rail cars.
- ❖ **New industrial sites within the rail loop.** Potential customers and barge-using industries have few options for locating new businesses in the Daviess County area. ORA needs additional ground area for its own operations and developed sites ready for capturing future opportunities. The land inside the existing rail loop can be developed to help meet these needs. Development requires placement of engineered fill, grading, drainage, and capping the area with suitable thicknesses of compacted stone.
- ❖ **Wetland mitigation inside the rail loop.** Two wetlands areas within the rail loop must be addressed for the projects described above to proceed. The smaller Phase 1 wetlands mitigation may be needed for construction of the inner rail loop, depending on its final design and location relative to the wetlands which have been identified. The Phase 2 wetlands mitigation will be needed if/when the remaining acreage within the loop is developed. Both areas are shown on *Exhibit 3-1*.
- ❖ **New bulk materials and/or liquids docks.** Developed land inside the rail loop may attract users which move, store, handle, process, and/or distribute dry bulk or liquid bulk commodities. There is adequate river frontage for two strategically positioned barge docks for liquid or dry bulk loading/unloading just east of the rail loop. These docks

could be used for river/rail transfer or to provide river access for new operations within the rail loop.

Other proposed capital projects are located along the Ohio River frontage.

- ❖ **Riprap bank protection.** Budget constraints limited the extents of river bank protection constructed along with the new General Cargo Dock in 2014. Construction of additional riprap bank protection is recommended both upstream and downstream from the current extents of riprap near the new General Cargo Dock, as well as along the sides of the drainage ditches which discharge into the river both north and south of the new dock.
- ❖ **Mooring dolphins at the Low Road Dock.** The Low Road has been used for general cargo and dry bulk operations during the entire history of ORA. The grain facility at the south end of the Low Road also uses the mooring dolphins here. Some mooring structures at the Low Road Dock have been damaged over time from repetitive barge strikes. Repair or replacement is needed.
- ❖ **Other projects** identified for future capital investment include a new modular warehouse, new fertilizer or dry bulk operations building and related conveyors, and off-site rail car storage and switching tracks.

3.3. Phased Development and Implementation

ORA adopts a capital budget each year. The 2016-17 capital budget contains the initial implementation of essential elements of this plan. *Exhibit 3-2* includes the recommended list of projects for the next ten years.

Strategic Capital Investment Plan for ORA			Anticipated Order of Magnitude Cost
#	Line Item Description	Timing	Subtotals
		FY	
1	Construct scale house and related work	2016-17	\$250,000
2	Design and obtain CSX approval for inner loop	2016-17	\$80,000
3	Design and obtain CSX approval for rail access to the aluminum yard	2016-17	\$60,000
4	Mitigate wetlands inside rail loop - (approx 1 acre) sufficient for the inner loop rail project	2016-17	\$100,000
6	Design and construct new Rinaldo main entrance gate and entry, truck lanes, truck staging area and security	2016-17	\$200,000
8	Construct security projects (fencing, gate controls, guard house, cameras, generator, lighting)	2016-17	\$900,000
9	Construct new hardstand area in aluminum yard (compacted fill, grading, drainage, rock surface)	2016-17	\$500,000
10	Construct Phase 1 rail sidings at loop to maintain level of service (inner loop east, with grade crossing for truck access, casing pipes for utility access, earthwork for 50 ft wide bench around inside entire loop)	2016-17	\$1,360,000
11	New crane bucket and mobile hopper	2016-17	\$300,000
12	New skip pans for unloading aluminum from barges	2016-17	\$200,000
Subtotal for FY 2016-2017			\$3,950,000
13	Fill and drainage work to build new operations area in the aluminum yard and inside the rail loop	2017-18	\$1,500,000
14	Preliminary design and permitting for new bulk dock for barges at rail loop (including hydrographic, land surveying, and geotec)	2016-17	\$80,000
15	Off-site rail preliminary work with CSX	2016-17	\$100,000
16	Property Acquisition	2016-17	\$200,000
17	FTZ Expansion	2016-17	\$30,000
18	Ramps for access into Warehouses #2 and #3	2016-17	\$50,000
19	Repair or replace 2 mooring structures at Low Road (includes survey, geotec and design for all 5 structures and construction for 2)	2016-17	\$700,000
20	Construct rail access to aluminum yard	2016-17	\$900,000
21	Mitigate wetlands inside rail loop for individual sites (5.25 acres)	2018-19	\$700,000
22	Extend riprap bank protection downstream from new dock to drainage ditch and within ditch	2018-19	\$300,000
23	Extend riprap bank protection from new dock to CPS ditch and within ditch	2017-18	\$300,000
Subtotal for FY 2017-2018			\$4,860,000

24	Design for Modular Warehouse	2017-18	\$170,000
25	Earthwork, grading and drainage for Modular Warehouse	2018-19	\$900,000
26	Final design and construction to widen Rinaldo from Crane Shed to River Road (including grade crossing but not signalization)	2017-18	\$1,600,000
27	Final design and construction of off-site rail yard to improve service at ORA	2017-18	\$1,500,000
28	Repair or replace 3 mooring structures at Low Road	2018-19	\$800,000
26	Final design and construction for roads and utilities to serve sites inside rail loop	2018-19	\$1,300,000
	Subtotal for FY 2018-2019		\$6,270,000
27	Fill and drainage work to build new operations area in the aluminum yard and inside the rail loop	2019-20	\$1,100,000
25	Construct Phase 2 rail sidings at loop to maintain level of service (west)	2018-19	\$900,000
26	Construct Modular Warehouse Phase 1	2019-20	\$4,000,000
	Subtotal for FY 2019-2020		\$6,000,000
27	Construct Phase 2 earthwork, grading, drainage inside loop to create new sites (north half of loop)	2020-21	\$1,900,000
28	New bulk materials dock and mooring structures near rail loop	2020-21	\$4,000,000
	Subtotal for FY 2020-2021		\$5,900,000
29	New rail-served steel center warehouse with OBC	2021-25	\$7,000,000
30	Conveyors and transfer stations for rail loop area bulk materials	2021-25	\$3,000,000
31	New fertilizer storage and distribution building at rail loop	2021-25	\$6,000,000
28	New crane to replace LinkBelt	2020-21	\$1,700,000
32	Warehouse repairs/replacements	2021-25	\$5,000,000
33	New material handler for bulk	2021-25	\$2,000,000
	Subtotal for 5 years: FY's 2021-2026		\$24,700,000
	Total Strategic Capital Investments Identified in 2016 for Implementation by 2026		\$51,680,000

Exhibit 3-2. Strategic Capital Investment Plan for ORA

4. Closing

ORA owns and operates the largest public riverport in Kentucky near Ohio River Mile 759 in Daviess County. Its success in attracting business has resulted in intensive utilization of the existing facilities. ORA has used the 2012 Master Plan as a guide for developing capital projects which have resulted in greater capacities, expanded capabilities, and enhanced efficiencies in a very competitive marketplace.

Consistent with the original purpose and initial development of ORA, capital investments at ORA support local jobs and tax base throughout the area. Industries which use barge transportation typically pay higher than average wages and are capital intensive. Employee wages flow back through the local economy in many ways, such as purchases of housing, services, and retail goods, in turn supporting other sectors of the local economy. The capital intensive manufacturing plants pay local property taxes. Economic impact generated by ORA does not accrue back to ORA as cash flow, but rather stimulates the economic well-being of individuals and of the overall community.

ORA infrastructure and services provide access to economical barge and rail transportation for local industrial and agricultural employers. The reduction in transportation costs is significant to industries, natural resources, and agricultural producers for whom a large part of the cost of goods sold is transportation expense. This community benefit makes the area more attractive for existing industries as well as for the recruitment of new industries.

The Owensboro area must be competitive in recruitment of new jobs and tax base, and ORA must be prepared to keep step in a very competitive marketplace. Growth in shipments of cargoes such as aluminum to the Owensboro area is projected to increase. ORA has taken steps to keep pace with this growing demand and has plans for additional improvements.

The 2016 Update provides a physical master plan for ORA that shows strategic and efficient placement of facilities based on functional relationships. The value of this 2016 Update is not

only this document, but in the process itself of examining operations, existing and potential markets, and options for growth and sustainability. The plan describes critical strategic investments needed to help ORA maintain its position as the premier port on the Ohio River.

The Update will not only be used for guidance and strategic direction for the port ten years out into the future, but also as a communications tool that can be shared with key community leaders, investors, potential tenants, and customers. It presents an ongoing vision for future growth, expansion, and efficiency, and substantiates the need for local financial and promotional support.

To remain competitive, ORA must have the capability to handle a variety of general cargo items as markets evolve, continue to provide reliable services in varying river conditions, move cargo efficiently, deliver services in a timely manner, and control costs in a competitive marketplace. The 2016 Master Plan Update is specific enough to provide guidance, yet flexible enough to allow work to proceed in phases responsive to opportunities and funding and to make adjustments as needed in the future.

